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The development path of badminton with Chinese characteristics: Connotation, situation, and future

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Abstract: Exploring the development path of badminton with Chinese characteristics is a key area in advancing the reform of China's sports system and a crucial theoretical support for transitioning from a sports power to a sports powerhouse. This article reviews the overall situation of the development of badminton in China since the founding of the People's Republic of China, and based on this, puts forward the basic connotations and directions of the development path of badminton with Chinese characteristics. It discusses the opportunities and challenges faced in aspects such as badminton management system and mechanism, accelerated optimization and upgrading of sports industry and brands, substantial breakthroughs in competitive level, cultivation of reserve talents, and diversified development of sports culture. It explores the future direction of the development path of badminton with Chinese characteristics from five aspects: system, management, talent, industry, and culture.

Keywords: China; badminton; pathway

1. Introduction

The distinctive feature of Chinese sports lies in the government-led “whole-nation system,” which focuses national resources on cultivating elite athletes, particularly excelling in Olympic sports. Simultaneously, the integration of sports with education has been strengthened, driving the development of youth sports and the nurturing of reserve talents. The promotion of the national fitness plan has elevated the role of sports in everyday life, establishing a broad base of public participation (Qiu, 2024). Additionally, the sports industry in China is experiencing diversified growth, expanding from traditional sports events to emerging sports consumption sectors. By hosting and participating in international competitions, China continually enhances its global sports influence while emphasizing the dissemination and promotion of sports culture, embodying the values of fair competition, teamwork, and national spirit.

In the past two decades, Chinese badminton has experienced a glorious golden age. Whether in events such as the Thomas Cup, Uber Cup, Sudirman Cup, World Championships, or the Olympic Games, China has consistently maintained a high level of competitive performance, repeatedly winning championships and sweeping major events in men's singles, women's singles, men's and women's doubles, as well as mixed doubles, establishing an undisputed dominance (Zheng and Chen, 2016). This was made possible by the abundant talent pool of the Chinese badminton team, including prominent figures such as Xia Xuanze, Lin Dan, Bao Chunlai, Chen

Jin, Zhang Ning, Wang Yihan, Wang Lin, the “twin stars” of women’s doubles Yu Yang and Wang Xiaoli, the “dynamic duo” of men’s doubles Cai Yun and Fu Haifeng, and the formidable mixed doubles pairs of Zhang Nan and Zhao Yunlei, Xu Chen and Ma Jin, among others. This united and resilient team created the glorious era of Chinese badminton and became a source of pride for the nation.

According to statistics released by the Badminton World Federation, from 1992 to 2024, the Chinese badminton team won gold medals at the Olympic Games, gold medals at the World Badminton Championships, Thomas Cup titles since 1982, Uber Cup titles since 1984, and Sudirman Cup titles since 1989. In all these major international events, the Chinese team has always ranked first in total championship titles (Kong et al., 2017). These outstanding achievements have not only brought honor to the motherland but also demonstrated China’s leading position in badminton competitiveness globally, providing strong evidence for the cultivation of badminton talents. In order to sustain the sustainable development of the project’s advantages, the article mentions the work of summarizing successful experiences, exploring winning laws, seeking success factors, and discovering shortcomings. It emphasizes deepening the understanding of badminton projects, exploring their basic laws, and achieving “knowing oneself and knowing the enemy, a hundred battles without danger.”

Looking back at the development process of competitive badminton in China since the founding of the People’s Republic of China in 1949, in the 1980s, China’s badminton sports achieved comprehensive development goals and outstanding results, greatly inspiring the patriotism of the whole nation. Badminton activities flourished among the masses, promoting the reform of badminton management and training systems, gradually forming a training system led by badminton reserve talent bases. Under the guidance of the “Olympic Glory Plan” and the “National System,” the Chinese badminton team has cultivated a large number of outstanding competitive badminton talents, becoming a dominant project for Olympic gold medals and achieving countless impressive results. However, the article points out that against the backdrop of social transformation and deepening reforms in the sports industry, the original “three-level training” model is no longer able to meet the needs of sustainable development of badminton sports, forcing China to actively explore diversified training paths that adapt to social and sports development.

Tracing the origins and spread of badminton, the development of Chinese badminton is not an isolated event but a result of the combined influence of various factors. Economic, political, cultural, and other factors have jointly promoted the rise of badminton sports. The relationship between economic growth and sports development is mutually reinforcing. Economic prosperity provides substantial financial support for sports, ensuring the construction of infrastructure, the organization of sports events, and the training of sports talents. It also enhances people’s willingness and ability to participate in sports activities. This economic backing not only promotes the diversified development of the sports industry but also strengthens a nation’s competitiveness on the international sports stage (Gao, 2024). Conversely, sports development injects new vitality into the economy by stimulating related industries such as tourism, media, advertising, and consumer markets, creating employment opportunities, increasing tax revenue, and fostering sustained economic growth. Moreover, sports contribute positively to societal development by improving

public health, enhancing social cohesion, and promoting cultural exchange, thereby further supporting long-term economic growth. This bidirectional interaction creates a symbiotic relationship between sports and the economy, driving societal progress and prosperity.

2. The historical evolution of the development path of badminton with Chinese characteristics

The history of badminton in China can be traced back to the early 1950s. Before the founding of the People's Republic of China, there were some badminton activities and small-scale competitions in coastal cities, but they were limited in scale and of relatively low level. With the establishment of the new China, the first national badminton competition was held in Tianjin in 1956, with 49 male athletes and 29 female athletes from 11 cities participating. The return of a group of outstanding badminton players representing overseas Chinese brought advanced techniques and tactics from around the world, which promoted significant progress in the level of domestic badminton. Badminton was officially included as a competitive event in the first National Games, with participation from 21 provinces, municipalities, and autonomous regions.

In the early 1960s, outstanding young badminton players such as Tang Xianhu, Hou Jiachang, and Chen Yuniang returned to China, bringing advanced techniques and tactics, and the level of badminton in China made significant progress. Diversification of technical styles was advocated, and several advanced playing styles were developed, enabling Chinese badminton to take an important step forward in competitive ability. In 1963, the Indonesian badminton team visited China, and the Chinese team defeated the Indonesian team in friendly matches, demonstrating their strong strength. In 1964, the first national badminton training conference clarified the technical style of "fast, fierce, accurate, and lively" and the development direction of "being dominant, fast-paced, and aggressive". The Chinese badminton team, with its advanced technical style, fast-paced play, and flexible tactics, achieved a clean sweep during their European tour in 1965, earning the title of "uncrowned kings" from the European media.

In the 1970s, Indonesian badminton player Liang Hailiang became a "giant star", but did not compete against Chinese stars such as Tang Xianhu and Hou Jiachang. On several occasions, people eagerly awaited the fierce competition between the "uncrowned kings" and the "giant star". However, for various reasons, this long-awaited showdown never materialized.

In the early 1980s, the Chinese badminton team emerged in events like the World Games, winning four gold medals in men's singles, men's doubles, women's singles, and women's doubles. In 1982, they participated in the Thomas Cup for the first time, coming from behind with a 5:4 victory to win the World Badminton Men's Team Championship. In 1984, the Chinese women's badminton team won the Uber Cup again. In 1986, the Chinese men's and women's badminton teams swept the Thomas Cup and the Uber Cup at the Jakarta World Badminton Championships. In 1987, at the World Badminton Championships held in Beijing, Chinese athletes won all the championships, setting a record in badminton history.

In the early 1990s, despite badminton becoming an official Olympic event, the level of Chinese badminton fell into a trough, failing to win gold medals in world grand prix and Olympic competitions for consecutive years. However, through a series of measures, Chinese badminton gradually emerged from the trough in the late 1990s. At the 1996 Atlanta Olympics, Chinese athletes achieved remarkable results in women's doubles and men's singles events. In 1998, the Chinese women's badminton team regained the Uber Cup and won the Sudirman Cup for three consecutive years. In 2000, the Chinese women's badminton team once again won the Uber Cup, with the men's team finishing as runners-up. Although the Thomas Cup remained a challenging journey, Chinese badminton once again achieved brilliant results during this period. Since the 2004 Athens Olympics, the Chinese badminton team has repeatedly won gold medals in men's and women's singles, men's and women's doubles, and mixed doubles, demonstrating sustained excellence. At the World Championships, the Chinese badminton team has frequently won championships and medals, becoming a leading force in the global badminton arena and consolidating its outstanding position on the international badminton stage through a series of outstanding performances.

3. The connotation and direction of the development path of badminton with Chinese characteristics

3.1. Basic connotation

Xi Jinping emphasized in his report to the 19th National Congress: "There is no one-size-fits-all model for political systems, and political systems cannot be abstractly judged apart from specific social and political conditions and historical cultural traditions." China's national conditions are the most important factor in the development path of sports with Chinese characteristics (Song, 2024). Looking back on the 40 years of reform and opening up, the sports industry has also achieved commendable results with the vigorous development of China's economy and social undertakings, reflecting the high attention paid by the Party and the state to the sports industry, thanks to government leadership and the joint participation of the entire nation and society. However, it should also be clear that there is still a certain gap between China, a sports power, and sports powers like Europe and America.

Sports is undoubtedly one of the most important ways to promote people's all-round development, and people are the central element in carrying forward and practicing the core socialist values (Chen, 2021). Mao Zedong once said: "We come from the masses and we return to the masses, and we must follow the mass line." Adhering to the people-centered approach to development and putting people first are basic requirements for the construction of the socialist core value system with Chinese characteristics and the core values system of socialist sports. Physical health and strong physique are the foundation of people's production and life and the basic guarantee for building a socialized country. Zhou Enlai once said, "Only with good health can one study and work well. and can develop in a balanced way." Having a healthy body is one of the main ways to promote the construction of the core socialist value system. Under the guidance of Comrade Mao Zedong's sports development

policy of “developing sports and enhancing people’s physique,” the sports industry has developed rapidly, bringing huge economic benefits, ensuring the basic guarantee of the construction of the socialist core value system, and guaranteeing a favorable path for the construction of the core values system of socialist sports. Developing the cause of socialism with Chinese characteristics in sports is an important part of realizing the Chinese dream of national prosperity, rejuvenation, and people’s happiness. General Secretary Xi Jinping pointed out in his report to the 19th National Congress: Sports is a national strategy, and building a strong nation is the way to rejuvenation. To achieve the great rejuvenation of the Chinese nation, we must develop the road of sports, let traditional Chinese sports go abroad, continue to write splendid chapters on the world stage, strengthen sports diplomacy, and increase exchanges between Chinese and foreign sports cultures. Fairness and justice are the embodiment of sports truly serving the vast majority of the people, and they are also one of the basic contents of the core socialist values. Justice is a basic guarantee for the normal operation of the state from the national level, and it is also a basic content of the core values of socialist sports, ensuring that the vast majority of the people can participate in sports activities in a positive and harmonious atmosphere.

Therefore, the basic connotation of the development path of badminton with Chinese characteristics can be summarized as follows: First, adhere to the people-centered approach, give full play to the initiative of the masses, and make serving the people’s satisfaction with badminton the fundamental goal. Second, based on China’s national conditions, promote the coordinated development of national systems and market mechanisms as the driving force, promote the construction process of a healthy China, and enable hundreds of millions of people to share the benefits of sports. Third, expand the participation in badminton and aim to enhance the international influence of badminton as the target direction.

3.2. Development direction

Coordinating the development of mass sports and competitive sports, in the context of the new era, they should complement each other (Xiang et al., 2023). Firstly, as a widely accessible physical activity, recreational badminton plays a crucial role in enhancing the overall quality of the population. It not only contributes to individual health and mental well-being but also has practical significance in promoting the construction of socialist spiritual civilization. Secondly, competitive badminton, through its pursuit of “faster, higher, stronger, and more united,” embodies the spirit of excellence and teamwork in sports. This spirit can infuse society with strong positive energy, motivating more individuals to engage in social development and fostering societal harmony and progress. Therefore, both recreational and competitive badminton serve as vital forces in elevating the overall quality of society and advancing the development of spiritual civilization.

3.2.1. Sports management mechanisms

Optimizing sports management mechanisms is crucial for enhancing the overall efficiency and competitiveness of sports organizations. By streamlining processes and improving operational efficiency, sports organizations can better utilize resources, reduce waste, and gain an advantage in a highly competitive market. Additionally,

optimizing management mechanisms helps to increase economic benefits, reduce legal risks, enhance social responsibility, and promote innovation and sustainable development. This not only ensures that sports organizations remain dynamic in a complex and ever-changing environment but also facilitates the spread of sports culture and the realization of social values, laying a solid foundation for the long-term healthy development of the sports industry.

3.2.2. Value of the industry

Despite the continuous expansion of China's badminton industry, its value-added is still relatively low compared to developed countries, far from reaching the 3% average level of developed nations. Therefore, future development should focus on enhancing the overall value of the badminton industry by extending the industrial chain and optimizing the industrial structure (Zhu and Fang, 2024). Specific measures include promoting the optimization and upgrading of the industrial structure, and exploring new areas for sports industry development, thereby increasing the value-added of the sports industry. This means not only expanding the scale of the industry but also improving its economic benefits and competitiveness through innovation and structural adjustment, aiming to reach a higher level on the international stage.

3.2.3. Brand cultivation and innovation

With the accelerated pace of economic globalization, the competition in the international badminton sports market is intensifying. Innovating and cultivating our own national brands is an important way for the development of badminton with Chinese characteristics. Among the existing domestic brands such as Li-Ning, Victor, Kason, and Double Happiness, although they have certain competitiveness in the domestic market compared to international brands, they still face fierce market competition, and their market share needs to be improved. This situation is even more severe overseas, where international brand YY belongs to the mid-to-high-end market and has advantages in international visibility and target audience. Enhancing the market competitiveness and international influence of the badminton sports industry depends on the independent innovation of national brands.

3.2.4. Cultivation of sports culture

The development and cultivation of sports culture is a crucial avenue for promoting social harmony, enhancing national cohesion, and shaping individual character. Sports culture not only disseminates the spirit of fair competition, teamwork, and perseverance but also enriches public life and improves overall health by driving the development of the sports industry and fostering international exchanges. Its role in spreading positive social energy, strengthening international understanding and friendship, and promoting economic growth is irreplaceable. Therefore, the advancement of sports culture is vital for societal progress and individual development.

3.2.5. Cultivation of sports talent

The development and cultivation of sports reserve talent is key to ensuring the sustainable development of national competitive sports. Systematically training young athletes provides a pool of talented individuals for future high-level competitions, thereby ensuring the country's competitiveness on the international stage.

Furthermore, nurturing sports reserve talent not only enhances national sports strength but also promotes the popularization of sports among youth, drives the growth of the sports industry, and fosters well-rounded character in young people. This has significant implications for the long-term development of society and the nation. China, leveraging its substantial number of youth badminton players and robust national system, is strengthening the training and development of young talent by establishing a tri-party cooperation system among sports colleges, schools, and clubs, thereby creating a sustainable talent pool.

4. Realistic challenges facing the development path of badminton in China

4.1. Diversified institutional mechanisms

The management system of badminton in China faces various problems that significantly impact the training of competitive reserve talents and sustainable development (Sun and Zhao, 2011). Firstly, the management system for training competitive reserve talents in badminton consists of the Badminton Project Management Center, the Youth Department, and the Competitive Sports Department. However, there is a lack of coordination among these three departments. The lack of cohesion and unity leads to insufficient cooperation in work, which may hinder the circulation of information and affect overall work efficiency.

Secondly, there are relatively few policies and systems for amateur training. Although there are policies regarding amateur training in both the education and sports systems, the quantity is insufficient, which may restrict comprehensive talent development. This reflects a lack of sufficient support and attention in the amateur field, which may affect the development of athletes in non-professional environments.

The sports and education systems are relatively closed in the training of competitive reserve talents in badminton, operating independently without cooperation. This relatively independent operation mode not only wastes resources but also hinders the sustainable development of talent training. Establishing a closer cooperation mechanism and enhancing communication between different systems are key directions for optimizing the management system.

The singularity of training goals is also a problem. Currently, training goals still tend to prioritize “delivery over training”, which may limit the comprehensive development of athletes’ qualities. More flexible and comprehensive training goals can better adapt to the strengths and needs of different athletes.

Approaches to addressing these issues include strengthening cooperation and communication mechanisms among different management departments, increasing and improving the policy system for amateur training, breaking down barriers between the sports and education systems, and achieving more open cooperation. Additionally, improvements in organization and leadership at the management level are needed to ensure internal stability and provide a solid foundation for overall sports development. Ultimately, by absorbing successful experiences from other countries and combining them with China’s actual situation, adjusting and optimizing the badminton management system can promote the sustainable development of badminton in China.

4.2. Lack of substantial breakthroughs in badminton competitive level

Despite China's long-standing leading position in badminton technical skills, in recent years, we have had to face some worrying trends in badminton competition (Gao and Robinson, 2017). In the 2014 Thomas Cup tournament, China's tradition of winning the championship for five consecutive years was broken. In the semi-finals, they suffered a devastating 0:3 defeat against Japan, failing to reach the finals for the first time in twelve years since 2012.

Observing the World Badminton Championships and the Asian Youth Championships in recent years, China's dominant position in the competitive sports arena has gradually weakened. Especially in youth events, the Chinese youth team suffered consecutive losses in the 2010–2012 Asian Youth Championships, even losing all five championships in 2012, indicating a series of problems in the training of competitive reserve talents.

Meanwhile, other countries such as Indonesia, Malaysia, South Korea, and Japan have shown increasing emphasis and efforts in the training of badminton competitive reserve talents. This poses a significant threat to China's leading position in the world badminton scene. The decline in performance may be related to issues such as the single mode of badminton competitive reserve talent training nationwide, inadequate government policy support, and relatively few badminton events.

Furthermore, opponents have adopted new high-level and popular playing styles, while the Chinese team still tends to favor traditional old-style techniques. This indicates that the Chinese badminton team needs to catch up in terms of playing style innovation and the cultivation of a new generation of athletes to maintain competitiveness in the global badminton arena. In summary, it is urgent for us to comprehensively understand and address the issues in the current status of training competitive reserve talents in Chinese badminton competition, with the aim of regaining the leading position in badminton competition in the future.

4.3. Insufficient integration between youth training system and reserve talents

In the inadequacy of the badminton youth training system and the shortage of reserve talents, the deficiencies in the development environment are significant (Gao and Robinson, 2017). China's training of badminton competitive reserve talents mainly relies on the sports system, while the education system and the social system have not played their due roles, resulting in overly single training channels. Although badminton is widely popularized nationwide, the training of badminton competitive reserve talents has not fully utilized the badminton facilities in schools and clubs, leading to an incomplete training system. Although badminton has been increasingly incorporated into primary and secondary school curriculums, and badminton clubs continue to emerge in society, these institutions have not effectively fulfilled their functions in training competitive reserve talents, indicating an incomplete training system.

Another key issue is the lack of social security, as young athletes engaged in amateur training lack basic social security, especially since there is no established disability insurance system for outstanding athletes. This uncertainty in social security

for young athletes participating in training lowers their enthusiasm for amateur training. This also reflects that the improvement of social security levels in the badminton training system has an important impact on the attractiveness and training quality of reserve talents.

The imbalance in economic development between regions is also a significant problem because the selection and training of badminton competitive reserve talents require sufficient financial support. Due to the economic disparities among regions in China, some areas lack sufficient training resources due to relatively weak economies, resulting in uneven quality and quantity in the training of reserve talents. This not only affects the overall level of badminton sports but also limits the comprehensive development of reserve talents.

At the social and cultural level, there is a need to enhance understanding and awareness of badminton sports culture. Many training units only view badminton as a means to achieve sports achievements and competition honors, neglecting its educational functions in cultivating the physical and mental health and teamwork abilities of young people. This is reflected in the relatively low emphasis placed by training units on badminton sports culture, as well as the lack of dissemination and promotion of badminton sports culture.

There are various problems in training methods. Overall, the quality of coaches is low, with inadequate comprehensive coaching abilities. Training units focus too much on physiological indicators during selection but lack emphasis on psychological factors, resulting in unstable performance and decreased quality of reserve talents under competitive pressure. Coaches generally have low cultural quality, with low professional titles and educational levels, leading to inadequate comprehensive coaching abilities. At the same time, training units mainly rely on coach experience in training arrangements, lacking scientific methods, and having a relatively crude training process. This results in young badminton players lacking systematic and scientific training, affecting the improvement of their competitive level.

Finally, there is a single channel for the delivery of reserve talents, leading to insufficient preparation of reserve talents during the transition between old and new generations. Since training channels are mainly directed towards schools, outstanding talents are restricted in terms of mobility. Meanwhile, due to insufficient reserve strength, the competitive pressure on the national badminton team during the transition between old and new generations increases, affecting the overall improvement of competitive level. Addressing these issues requires comprehensive reforms and enhancements in policies, resource allocation, and educational systems. Solving these problems requires the collective efforts of the whole society to promote the comprehensive development of the badminton reserve talent training system.

4.4. Lack of innovation in national brands, slow development of badminton sports industry

As a popular sport with high skill requirements and low risk factors, badminton not only has a significant influence domestically and internationally but also enjoys a high status among the general public (Nam et al., 2019). With the development of China's economy and the improvement of people's living standards, badminton as a

popular sport has gained wider recognition. However, to further promote the development of the badminton industry, attention needs to be paid to the enhancement of national brands and sports events.

Despite the decline in the size of the badminton industry in 2020 due to the impact of the pandemic, effective control of the epidemic has led to a rebound in the market size to 7.58 billion yuan by 2022, a year-on-year increase of 14.5%. However, there is still considerable room for improvement in the promotion and cultural dissemination of badminton brands in the market.

In the current industry supply and demand situation, the production and consumption of badminton continue to grow, but more attention is needed on the core position of national brands in the badminton industry chain. In terms of pricing, although there is an overall increase, the enhancement of national brands and sports events can inject more cultural elements into high-end badminton products, driving market upgrading.

Li-Ning Co., Ltd., as one of the leading enterprises in the badminton industry, already has strong capabilities in brand marketing, research and development, and design. However, with the continuous development of the industry, it is necessary to further enhance investment in events and industry innovation to improve the depth and breadth of badminton culture. This will not only help promote the comprehensive development of enterprises but also inject new vitality into the entire industry.

The expansion of the badminton industry has brought more added value, but sports events, as the core nodes of badminton culture, need more policy guidance and strengthening. The implementation of the national fitness plan provides opportunities for the development of mass sports, while the strengthening of sports events will be crucial for the wider dissemination of badminton industry. In various links of the badminton industry chain, sports events should become the dispatching center of the entire industry chain, improving its service level and increasing the added value of the core part of the industry chain.

In terms of market structure, although there will be no fundamental changes in the short term, in the long run, the promotion of brand innovation will affect the improvement of marketization degree, prompting more companies to exhibit new market behaviors in the badminton industry chain. Through increasing the technological content of badminton rackets, advertising, and organizational adjustments, brand innovation is expected to expand market share and encourage new companies to enter and share industry profits.

In summary, there is still great potential to be tapped in enhancing national brands and sports events in the badminton industry. Through cultural innovation, policy guidance, and strengthening of innovation capabilities, badminton culture can be deeply rooted in people's hearts, promoting the comprehensive development of the badminton industry.

4.5. There is still room for depth and breadth in the dissemination of sports culture

The culture of badminton sports is the sum of spiritual and material cultures created by people engaging in badminton sports (Dunning et al., 1971). This includes

the values, self-concepts, techniques, tactics, various ideas, and the rules and regulations during matches. This culture has characteristics of nationality, era, inheritance, hierarchy, and competition, and its role is reflected in multiple aspects such as education, health, entertainment, commerce, and politics.

In badminton sports, sports spiritual culture coincides with badminton spiritual culture. Sports spirit here is defined as a cultural ideology formed through sports activities, which is the sum of human positive consciousness. As a sports activity, badminton is influenced by the traditional cultural spirit of China, embodying the spirit of fair competition, patriotism, striving for progress, teamwork, and exploration and innovation.

In terms of sports institutional culture and badminton institutional culture, institutional culture is regarded as the embodiment and guarantee of badminton spiritual culture. The development of each sports project is inseparable from the cultivation and foundation of institutional culture, and the successful development of badminton sports also benefits from the support of institutional culture. This reflects the close relationship between sports culture and social cultural background, forming the cornerstone of supporting the development of great undertakings.

Furthermore, sports material culture and badminton material culture also play an important role in badminton sports. The development of badminton sports benefits from different types and characteristics of badminton buildings, venues, signs, and clothing, among which national brands like Li-Ning specifically embody the spiritual culture of badminton teams. The development of these material cultures profoundly influences the development of sports and also provides a solid mass base for badminton projects.

Overall, the inheritance of badminton sports culture covers spiritual culture and material culture. Through the inheritance of sports spirit, institutional culture, material culture, etc., badminton sports can thrive on the basis of Chinese cultural traditions. However, there are still problems such as imbalance in cultural development, contradictions in cultural identity, and lack of recognition of the basic characteristics of professional sports in the process of cultural inheritance. Therefore, it is recommended to promote the inheritance of badminton sports culture through methods such as ideological education and scientific training, direct participation and experience of participants, appreciation of events, and communication and dissemination of participants. In terms of dissemination, various methods such as language, electronic networks, commercial advertising, and education and training can be used. In the main paths of cultural inheritance, campus culture can be built, attention can be paid to mass culture, competitive culture can be promoted, and industrial culture can be developed.

5. The future direction of the development path of Chinese characteristic badminton

5.1. Driving development of badminton with reform and innovation, perfecting the governance system of Chinese characteristics

To improve the governance system of badminton, attention must first be given to

the construction of the management system, especially in the development of badminton competitive reserve talent (Zakizadeh and Kohandel, 2023), which is one of the most important external factors. Given the problems existing in the current management system, it is necessary to further improve this system on the basis of adhering to the “national system” to promote and ensure the sustainable development of badminton projects (Ekholm, 2019).

5.1.1. System construction and organizational institutions

The historical development experience of badminton projects shows that the “national system” is the institutional basis for the success of badminton competitive sports in China. This system has played a crucial role in both the planned economy era and the market economy era. However, in the process of deepening the market economy, the “national system” has also exposed problems such as the imbalance between competitive sports and mass sports, the weakness of competitive reserve talent teams, and the lack of cultural education for athletes. To solve these problems, it is necessary to further adjust and improve the “national system” on the basis of perfection, actively adapt to the development laws of badminton reserve talents under the market economy system.

5.1.2. Strengthening organizational management

It is necessary to strengthen the macro-management and guidance of badminton competitive reserve talent training by various levels of management departments. This includes emphasizing policy orientation, development plans, project layout, and capital investment. This strengthening will make management departments pay more attention to the training of badminton competitive reserve talents and fully realize their guaranteeing role in the competitive level of badminton projects.

5.1.3. Deepening institutional construction

Based on organizational management, further improve the institutional construction of badminton projects. This includes strengthening the policy and institutional construction of various levels of management departments, the General Administration of Sport, the Chinese Badminton Association, and local badminton associations. Through policy and institutional guarantees, ensure that the training of badminton competitive reserve talents has clear direction and norms.

5.1.4. Improving supervision mechanisms

In addition to focusing on institutional construction, it is equally important to improve supervision mechanisms. Supervision is not only to establish systems but also to ensure the effective implementation of policies and systems. Only by effectively supervising the implementation of policies and systems can the goals of system construction be truly achieved.

In addition to strengthening organizational management, focusing on institutional construction, and improving supervision mechanisms, it is also necessary to actively explore new models that adapt to the development laws of badminton reserve talents under the market economy system. Through these efforts, we can promote the sustainable development of badminton projects in China and ensure that they achieve more achievements on the international stage.

5.2. Innovating the development mechanism of Chinese characteristics badminton with meeting people's needs at the core

The advancement of mass badminton sports in China carries considerable significance. With the progression of the social economy, the evolution of societal ideologies, the rise in social demands, alongside the implementation of the national fitness program and the Olympic glory initiative, badminton sports in China have witnessed swift growth and broadening. In an era characterized by informatization and technological progress, where physical labor diminishes while leisure time expands, sports activities have become indispensable for individuals to pursue health, exercise, and nurture their character (Chan and Lee, 2020).

Badminton sports in China have always been a traditional advantageous discipline. Due to its characteristics of non-physical confrontation, high safety, and ease of participation, it has become the preferred choice for a vast number of sports enthusiasts. This sport has not only achieved success in competitive sports but has also gradually played an important role in mass sports. Surveys and studies show that badminton is one of the most participated fitness activities in China, with a participation rate of 42.6%, second only to walking and running.

In terms of hardware facilities, major universities, enterprises, institutions, and communities actively construct badminton courts and open them to the public, providing more opportunities for participation (Cabello-Manrique et al., 2022). However, the current situation of badminton training faces some issues, including disparities in the level of coaches and unclear management systems. Therefore, it is necessary to strengthen the training and management of the coaching team.

Furthermore, the active participation of badminton clubs, competitions, and businesses has driven the development of badminton sports. Through various forms of competitions, internal club activities, and sponsorship from businesses, badminton sports have gradually formed a virtuous cycle of commercial models. Market monitoring data shows that the participants in badminton sports are mainly concentrated in the 15–45 age group, accounting for as high as 88.81%.

To better develop mass badminton sports, the following strategies can be adopted: focusing on mass events, organizing various forms of badminton competitions, and creating a strong atmosphere of badminton among the general public; lowering the threshold for competition and attracting more people to participate by organizing grassroots sports programs, such as “Who is the Badminton King”; improving the coaching team by introducing a national professional coach certification system, enhancing the coaching level, and ensuring the cultivation of reserve talents; while popularizing sports knowledge, spreading badminton culture, advocating etiquette education, and closely integrating badminton sports with culture. Through these measures, the comprehensive development of badminton sports in China can be promoted, making greater contributions to achieving the national fitness goals.

5.3. Harnessing sports events optimization to forge a distinctive badminton event system in China

Establishing a distinctive badminton event system in China is a crucial task for

the future development of badminton sports. Guided by the principle that “the ultimate development direction of competitive sports is towards professionalism,” our aim through a professionalized model is to enhance the level of badminton sports, international tournament results, and the societal significance of the sport. This includes cultivating more competitive talents, tapping into a broad consumer market, as well as increasing the sport’s influence among the general population and its status within domestic sports (Kong et al., 2017).

Furthermore, this development direction also helps to stimulate the enthusiasm of foreign athletes, enabling them to actively participate and support the global development of badminton. However, the development of the Chinese Badminton Super League also faces several challenges. Firstly, the lengthy duration of the matches often conflicts with international tournaments, necessitating the formulation of a more reasonable schedule to ensure adequate preparation time for players. Secondly, the matches lack attractiveness; fatigue among athletes leads to top players avoiding participation, while systemic loopholes contribute to the frequent occurrence of “top player avoidance.” Addressing these issues requires adjustments to the rules to increase the excitement of the matches. Additionally, the league has low visibility among the public, and its commercial value remains underappreciated. To enhance its commercial value, active promotion and attracting more sponsors are essential. Clubs face financial challenges, necessitating the establishment of a more robust financing and sponsorship mechanism to ensure the stable operation of the league. Lastly, the inadequacy of television broadcasts limits the league’s reach, highlighting the need to strengthen cooperation with mainstream media to improve the quality and coverage of television broadcasts.

By addressing these issues, we can better propel the development of the badminton event system, making it more competitive, attractive, and influential, thereby laying a solid foundation for the long-term development of badminton in China.

5.4. Focusing on reforming events to optimize the unique badminton national team preparation mechanism in China

To promote the preparation of the national badminton team, a profound reform of the Chinese badminton event system is urgently needed. Despite the Chinese badminton team’s repeated triumphs on the world stage, winning prestigious titles such as the Thomas Cup, Uber Cup, and Sudirman Cup, along with magnificent achievements like the five championships at the 1987 Beijing World Championships, 2010 Paris World Championships, 2011 London World Championships, and 2012 London Olympics, beneath these dazzling accolades lie several underlying issues. The global badminton competitive landscape is dominated by an “Asia-centric core led by China,” a lopsided status quo that has gradually placed the Chinese badminton movement at risk due to excessive complacency.

Despite the international renown of Chinese badminton, the development of the Badminton Super League lags behind. Issues exist in league structure, match attractiveness, long-term sponsors, and television broadcasts, with the latter playing a crucial role in sports event planning. To drive the development of the Badminton

Super League, a strategic overhaul is required, including shortening the league's duration, enhancing match attractiveness, improving commercial operations, and securing CCTV television broadcasting rights. These adjustments will make the league more appealing and influential, laying a solid foundation for its long-term development.

Regarding reform, the first step should be shortening the Badminton Super League's duration to ensure flexibility in scheduling matches, avoiding conflicts with major international tournaments, thus allowing the national team better preparation. Secondly, increasing match attractiveness by introducing more entertaining formats like mixed 3V3 matches to enhance audience engagement. Additionally, the Badminton Super League needs to delve deeper into commercial operations, develop targeted plans, utilize the "star effect" for promotion, collaborate with sponsors, and enhance the league's visibility and commercial value. Finally, securing CCTV television broadcasting rights is crucial for broader exposure and increased influence. These reform measures are expected to inject new vitality into the Chinese badminton event system, propel the national team to outstanding performances on the international stage, and further consolidate China's leadership position in global badminton competition.

5.5. Seizing the opportunity to deepen the integration of sports and education, enhancing the specialized badminton youth training system in China

Deepening the integration of sports and education is essential for improving the training system for young athletes (Yu and Yu, 2020). The high elimination rate in competitive sports results in the majority of badminton players ending their professional careers in their twenties. Therefore, it is crucial for them to acquire sufficient scientific and cultural knowledge during their youth to better adapt to social life after retirement and maintain their competitiveness (Kristiansen and Houlihan, 2017). This is the key factor for sustainable development in the training of reserve talents in competitive sports abroad, as well as the direction for the development of reserve talents in Chinese badminton. Therefore, we must establish a new concept of talent development and ensure comprehensive development by strengthening the integration of sports and education in the training of reserve badminton talents. This not only meets the needs of the development of competitive sports but also considers the aspirations of young individuals and their families for the future. Badminton athletes in the student age group should actively participate in sports training while ensuring their engagement in cultural studies. By simultaneously improving their cultural knowledge and athletic skills, a solid foundation is laid for the comprehensive development of each athlete, thereby promoting the sustainable development of competitive badminton.

As the vast majority of reserve badminton talents are in the nine-year compulsory education stage, the degree of attention given by China's education sector, relevant policies, the level of system perfection, and implementation status concerning amateur training have a significant impact on the training of reserve badminton talents, highlighting the critical influence of education on sports. Therefore, through close

cooperation between sports and education departments, with the goal of cultivating high-quality sports talents with comprehensive development, adopting an integrated approach of sports and education, administrative cooperation can be conducted, complementary advantages can be achieved in resources, and various forms can be realized. Promoting the integrated development of sports and education in the training of reserve badminton talents can be achieved through the following aspects:

Deepening the concept of quality education and increasing the importance of sports in the education sector: The education sector should change its mindset and elevate sports to the same level of importance as cultural education, adhering to the concept of quality education, and supporting amateur training in primary and secondary schools in all aspects.

Encouraging the integration of youth badminton amateur training into the daily work of the education system: Gradually establishing a badminton reserve talent training system with “government management and diversified development of training subjects,” increasing the scale and level of training in the education system, and promoting and increasing the number of training subjects for reserve badminton talents.

Emphasizing the cultural education effects of reserve badminton talents: Sports and education are interdependent, and without education, there may be risks. Therefore, while objectively evaluating the athletic level of reserve talents, attention should also be paid to comprehensive development, fully considering physical and cultural qualities.

Increasing the influence of badminton in schools: Improving hardware facilities by effectively utilizing funds, increasing the number of badminton venues in schools, strengthening the training and selection of professional badminton teachers, and promoting the development of badminton in schools. In addition, recruiting badminton talents and organizing regular competitions and leagues can increase students’ interest in badminton and cultivate more reserve badminton talents (Strandbu et al., 2020).

Learning from the system of Japanese university leagues: Emulating the league system of Japanese universities, regularly organizing university badminton competitions, promoting the enhancement of badminton atmosphere in schools, and stimulating students’ love and pursuit of badminton.

Through these measures, we can comprehensively promote the integration of sports and education in the training of reserve badminton talents, providing stronger support for their comprehensive development. This helps establish a healthy training system for competitive badminton reserve talents, enhances the international competitiveness of Chinese badminton, and cultivates more outstanding national badminton reserve talents.

5.6. Coordinated efforts across multiple departments to enrich the distinctive badminton industry in China

To jointly promote the development of the badminton industry, a series of measures can be taken to fully utilize the abundant yet untapped production factors in the Chinese badminton industry. Firstly, it requires both government and social efforts to construct mechanisms for creating production factors. This entails formulating

policies and providing financial and technological support to ensure sufficient foundational backing for the badminton industry.

The domestic market demand in China will serve as a continuous innovative driving force for industry development and is also key to gaining competitive advantages amidst fierce competition. In the service industry, customer demands for product quality and service will directly influence the direction of industry development. Therefore, enterprises in the badminton industry need to focus on enhancing product quality and service levels to gain an edge in market competition.

There exist common industrial values and target groups between upstream and downstream enterprises in the badminton industry, providing them with opportunities for complementary resources and information sharing. By establishing cooperative relationships, the badminton industry can form stronger competitiveness in sales, technology, and services.

To break free from administrative constraints, badminton enterprises need to focus on enhancing their core competitiveness. This includes fully utilizing domestic environmental advantages, integrating internal industry resources, and gradually achieving strategic objectives. At the same time, possessing an international brand awareness and actively venturing into international markets will help expand the influence of the badminton industry globally.

With the new opportunities brought by the national industrial restructuring to the tertiary industry, the badminton industry has made significant progress in the economically developed regions in the eastern part of China. To further develop, the badminton industry can seize the opportunity to take root and sprout in the central and western regions, achieving balanced development nationwide.

Lastly, the government should seek a balance between intervention and *laissez-faire* to ensure that administrative power does not become a constraining factor in the development of the badminton industry. This requires establishing reasonable market supervision mechanisms and industry self-discipline norms to promote the healthy development of the industry.

5.7. Guided by the spirit of Chinese sportsmanship, cohesion of distinctive badminton cultural elements in China

To foster the cohesion of distinctive badminton cultural elements guided by the spirit of Chinese sportsmanship, action needs to be taken on multiple levels (Dunning et al., 1971). China's sports spirit emphasizes perseverance, teamwork, and the courage to challenge oneself to achieve higher, faster, stronger, and more unified goals. It advocates for fair competition, respects opponents, and simultaneously promotes national spirit and patriotism, striving to bring glory to the country on the international stage. China's sports spirit not only reflects the struggle and resilience in competitive sports but also embodies the pursuit of collective honor and a sense of social responsibility. Here are some detailed descriptions:

5.7.1. Emphasizing the dissemination of badminton sports culture in talent cultivation

In the process of cultivating badminton athletic talent, managers and coaches need to deeply understand the value of badminton sports culture. Only when managers

and coaches recognize the positive role of culture in the development of badminton sports and begin to emphasize its dissemination can badminton athletic talent better understand and integrate into the badminton sports culture (Wheaton, 2007).

5.7.2. Exploring the connotations of badminton sports culture

While badminton sports originated in England, it has achieved tremendous development in Asia, particularly in China. Badminton sports culture has played a crucial role in this process. To better promote badminton sports, it is necessary to delve into and explore the connotations of badminton sports culture. Encouraging researchers to strengthen their research on badminton sports culture will help better understand and inherit its essence.

5.7.3. Formulating comprehensive rules and regulations

To enhance competitive badminton levels, it is necessary to establish sound rules and regulations. Additionally, attention should be paid to increasing public attention to badminton and promoting extensive badminton activities in rural areas. By coordinating urban and rural development, support and attention to badminton sports can be ensured at all levels.

5.7.4. Cultural sustainability in the context of globalization

Given the trend of globalization, China should correctly handle its national and distinctive characteristics in badminton sports development. Using cultural theory to guide practice, exploring and integrating the cultural core of badminton sports, and creating a world environment conducive to the interactive symbiosis of badminton sports will help demonstrate and enhance China's unique charm while promoting badminton sports culture. The distinctive badminton culture in China represents a unique expression within the sport, integrating national spirit, grassroots involvement, and a blend of tradition and modernity. It not only showcases the competitive spirit and international achievements of Chinese badminton players but also emphasizes the sport's role in promoting national fitness. Developing badminton culture can enhance the country's standing in the international badminton arena, promote public health, identify and nurture future badminton talent, and simultaneously enrich social cultural life, strengthening societal cohesion and harmony.

5.7.5. Reforming the concept of the Badminton World Federation (BWF) and promoting cooperation

The BWF should shift its inherent mindset and advocate the concept of "strengthening the strong, leading the weak, and jointly developing." By improving the organization level of traditional events, increasing the number of events during holidays, refining competition system rules, implementing competition stratification, and encouraging badminton players from less developed countries to actively participate, the enthusiasm of players from all countries can be enhanced.

5.7.6. Strengthening the timeliness and diversity of communication media

In the dissemination of badminton culture, it is necessary to strengthen the timeliness of communication media and expand the coverage of dissemination. Utilizing the guiding role of modern media, through social media, television, online platforms, etc., providing audiences with new concepts and thoughts, and disseminating badminton sports culture in multiple ways and forms will cultivate more

young people's awareness of exercise habits and cultural inheritance, making them inheritors and disseminators of badminton sports culture.

These measures aim to comprehensively promote the development of badminton sports culture, guided by the spirit of Chinese sportsmanship, further consolidating and enhancing China's position in the field of badminton.

6. Conclusion

In summary, Chinese badminton has achieved remarkable success over the past few decades. However, with changes in the social, economic, and sports environments, it now faces several challenges. The success of Chinese badminton is not only attributed to high-level competitive performance but also to the support from the national system, cultural background, and widespread public enthusiasm. Nonetheless, as global competition in badminton intensifies, there is a need for further optimization and reform in management mechanisms, talent development, industry growth, and brand innovation.

For the future sustainable development of Chinese badminton, the following aspects should be prioritized: First, deepen management system reforms to enhance inter-departmental collaboration and improve the scientific and effective nature of training systems. Second, actively explore diversified youth training systems, leveraging resources from society, schools, and clubs to cultivate more outstanding reserve talents. Third, increase the added value of the badminton industry, promote innovation in national brands, and enhance competitiveness in the international market. Lastly, strengthen the dissemination and promotion of badminton culture to consolidate the grassroots foundation and provide robust support for the long-term development of Chinese badminton.

By thoroughly addressing the current challenges, Chinese badminton is poised to reaffirm its international leadership and continue bringing honor to the country and its people in the future.

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